What is claimed is:

1. A method of deconjugating a modifier protein from a target protein, wherein the modifier protein is conjugated to the target protein via a peptide bond between the carboxy terminus of the modifier protein and a free amino group of the target protein, the method comprising contacting the target protein to a polypeptide comprising a subunit characterized as JAB subunit.

2. The method of claim 1, wherein the target protein is a cullin protein.

3. The method of claim 2, wherein the target protein is Cul1, Cul2, Cul3, Cul4A, Cul4B, or Cul5.

4. The method of claim 1, wherein the target protein has ubiquitin ligase activity.

5. The method of claim 1, wherein the target protein is part of a protein complex having ubiquitin ligase activity.

6. The method of claim 1, wherein the modifier protein is NEDD8, UBL1, SMT3H2, SMT3H1, APG12, FAT10, Fau, UCRP, URM1, or UBL5.

7. The method of claim 1, wherein the polypeptide is a polypeptide complex of COP9/signalsome.

8. The method of claim 1, wherein the polypeptide is AMSH, AMSH1, or AMSH2.

9. The method of claim 1, wherein the target protein is exposed to the polypeptide *in vitro*.

10. The method of claim 1, wherein the target protein is exposed to the polypeptide *in vivo*.

11. A method for screening for an agent that affects deconjugation of a modifier protein from a target protein, wherein the modifier protein is conjugated to the target protein

via a peptide bond between the carboxy terminus of the modifier protein and a free amino group of the target protein, the method comprising

incubating in the presence and absence of a test agent, the target protein and a polypeptide comprising a subunit characterized as JAB subunit,

determining the effect of the test agent, wherein an increase or decrease in the amount of the target protein not conjugated to the modifier protein caused by the test agent is indicative of an agent affecting deconjugation of the modifier protein from the target protein.

12. The method of claim 11, wherein the target protein is a cullin protein.

13. The method of claim 12, wherein the target protein is Cul1, Cul2, Cul3, Cul4A, Cul4B, or Cul5.

14. The method of claim 11, wherein the target protein has ubiquitin ligase activity.

15. The method of claim 11, wherein the target protein is part of a protein complex having ubiquitin ligase activity.

16. The method of claim 11, wherein the modifier protein is NEDD8, UBL1, SMT3H2, SMT3H1, APG12, FAT10, Fau, UCRP, URM1, or UBL5.

17. The method of claim 11, wherein the polypeptide is a polypeptide complex of COP9/signalsome.

18. The method of claim 11, wherein the polypeptide is AMSH, AMSH1, or AMSH2.

19. The method of claim 11, wherein a test agent decreasing the amount of the target protein not conjugated to the modifier protein is indicative of an agent decreasing deconjugation of the modifier protein from the target protein.

20. The method of claim 11, wherein the target protein has the activity of peroxidase, alkaline phosphatase, or luciferase.

21. The method of claim 11, wherein the target protein is a fluorescent protein.

22. The method of claim 21, wherein the fluorescent protein is green fluorescent protein, yellow fluorescent protein, cyan fluorescent protein, or dsRed.

23. The method of claim 21, wherein the target protein is a fluorescent protein via chemical modification.

24. The method of claim 11, wherein the target protein causes production of a detectable signal upon deconjugation from the modifier protein.

25. The method of claim 11, wherein the polypeptide is a polypeptide complex of 26S proteasome.

26. The method of claim 11, wherein the polypeptide is a polypeptide complex of 26S proteasome and the modifier protein is an ubiquitin.

27. The method of claim 25, wherein the incubation is conducted in the presence and absence of the test agent, the target protein, the 26S proteasome, and a 20S inhibitor.

28. The method of claim 25, wherein the incubation is conducted in the presence and absence of the test agent, the target protein, the 26S proteasome, a 20S inhibitor, and ATP.

29. The method of claim 27, wherein the incubation further includes an inhibitor of deubiquitination by an ubiquitin isopeptidase.

30. The method of claim 25, wherein the target protein not conjugated to the modifier protein is not degraded.

31. The method of claim 25, wherein the target protein is Sic1.

32. The method of claim 25, wherein the 26S proteasome is purified from *S. cerevisiae*.

33. The method of claim 25, wherein the 26S proteasome is purified from eukaryotic cells.

34. The method of claim 25, wherein the 26S proteasome is purified from human cells.

35. An agent identified by the method of claim 11.

36. An agent identified by the method of claim 19.

37. An agent identified by the method of claim 25.

38. A method of increasing conjugation of a modifier protein to a target protein, wherein the modifier protein is conjugated to the target protein via a peptide bond between the carboxy terminus of the modifier protein and a free amino group of the target protein in a cell, the method comprising inhibiting a polypeptide comprising a subunit characterized as JAB subunit in the cell.

39. The method of claim 38, wherein the polypeptide is COP9/signalsome.

40. The method of claim 38, wherein the polypeptide is AMSH, AMSH1, or AMSH2.

41. The method of claim 38, wherein the polypeptide is 26S proteasome.

42. The method of claim 38, wherein the target protein is a cullin protein.

43. The method of claim 42, wherein the target protein is Cul1, Cul2, Cul3, Cul4A, Cul4B, or Cul5.

44. The method of claim 38, wherein the target protein has ubiquitin ligase activity.

45. The method of claim 38, wherein the target protein is part of a protein complex having ubiquitin ligase activity.

46. The method of claim 38, wherein the modifier protein is NEDD8, UBL1, SMT3H2, SMT3H1, APG12, FAT10, Fau, UCRP, URM1, or UBL5.

47. A method of treating a condition selected from the group consisting of neoplastic growth, angiogenesis, infection, chronic inflammation, asthma, ischemia and reperfusion, multiple sclerosis, rheumatoid arthritis, and psoriasis comprising administering an agent identified by the method of claim 19 to a subject in need of such treatment.